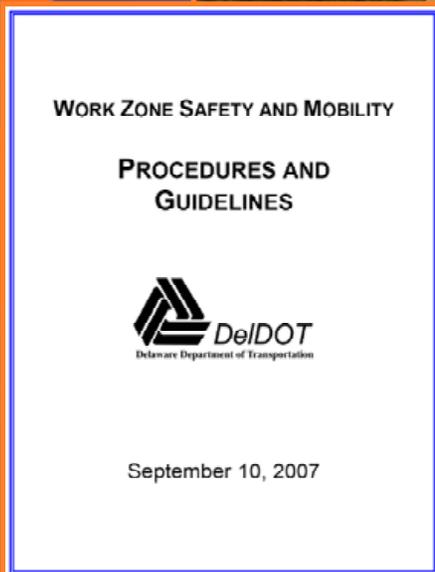
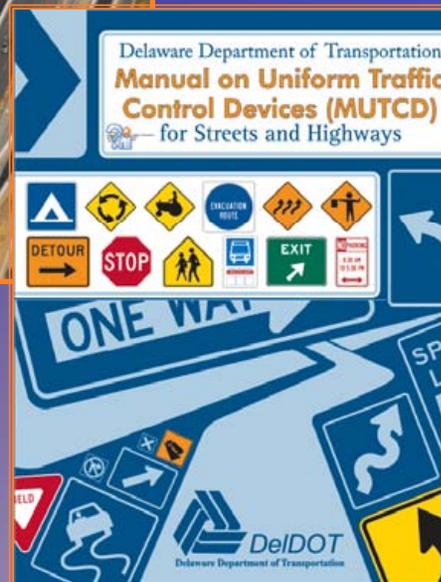


New DeIDOT Work Zone Safety Initiatives

Presentation to:
Moving Forward Workshop
Delaware T2 Center
February 17, 2009





Recent DeIDOT Safety Initiatives

- Strategic Highway Safety Plan (2006)
- Safe Routes to School Program (2007)
- New Occupational Safety Section (2007)
- **New Traffic Control Manual (2007)**
- Work Zone Safety & Mobility Guidelines & Procedures (2007)
- **Subpart K Initiatives (2008)**

DeIDOT Manual on Uniform Traffic Control Devices (MUTCD) Part 6 (Traffic Control Manual)

- Created to meet or exceed standards set forth in Federal 2003 MUTCD
- Follows same structure as Federal Manual
- Replaces 2000 DeIDOT Traffic Control Manual



Highlights of Changes

- Pedestrian Access
- Flagger Operations
- Drums
- Cones
- Barrier End Protection
- Truck-Mounted Attenuators
- Vertical Difference
- Storage of Equipment
- Cases



Pedestrian Access

- Must consider all road users
- American with Disabilities Act (ADA) requirements
- Temporary facilities shall be at least as accessible as existing facilities



Flagger Operations

- Flaggers required to wear ANSI/ISEA 107-2004 Class 3 apparel
- Orange head gear required
- Flagger station lighting required at night





03/01/2007 5:13 am

Channelizing Device Retroreflectivity

- New mandatory sheeting requirements
- Fluorescent orange and white prismatic retro reflective sheeting mandatory
- Effective ~~January 5, 2009~~ for contracts awarded after December 31, 2009



Cones

- Minimum height of 28 inches for all operations
- Cones not to be used for nighttime operations (unless emergency operation)



Barrier End Protection

- For speeds greater than 30 MPH, an impact attenuator or crash cushion shall be installed
- For speeds of 30 MPH or less, a tapered end may be used



Truck-Mounted Attenuators

- TMAs required by 15 of 26 cases, compared to 11 of 36 cases in previous DeIDOT Manual
- On cases that require TMAs, an average of 1.7 TMAs are required per case; compared to 1.2 TMAs in previous DeIDOT Manual
- All vehicles with TMAs shall be required to have arrow panels



Vertical Difference

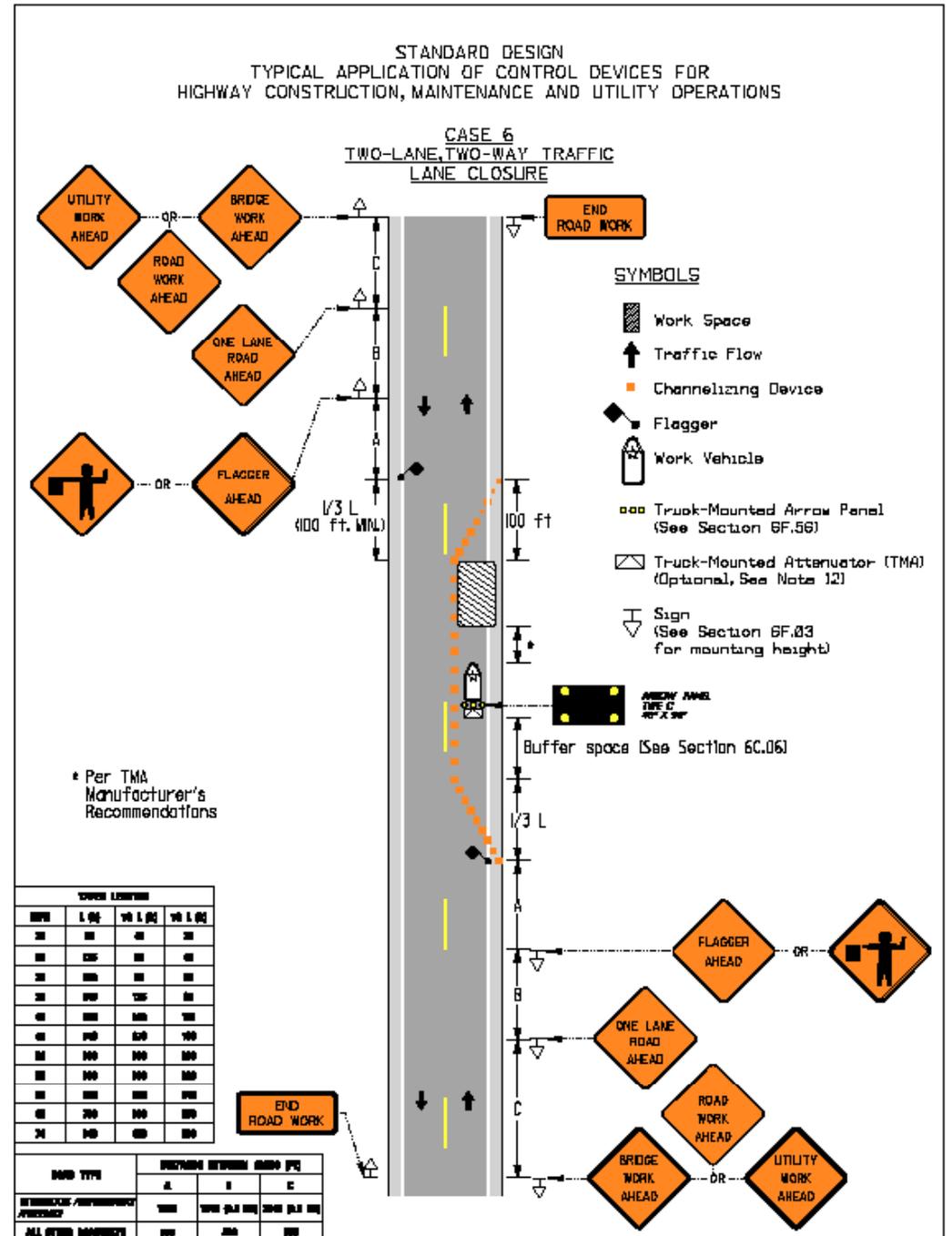
- Clarifies what devices are required for specific situations
- Further clarification coming soon



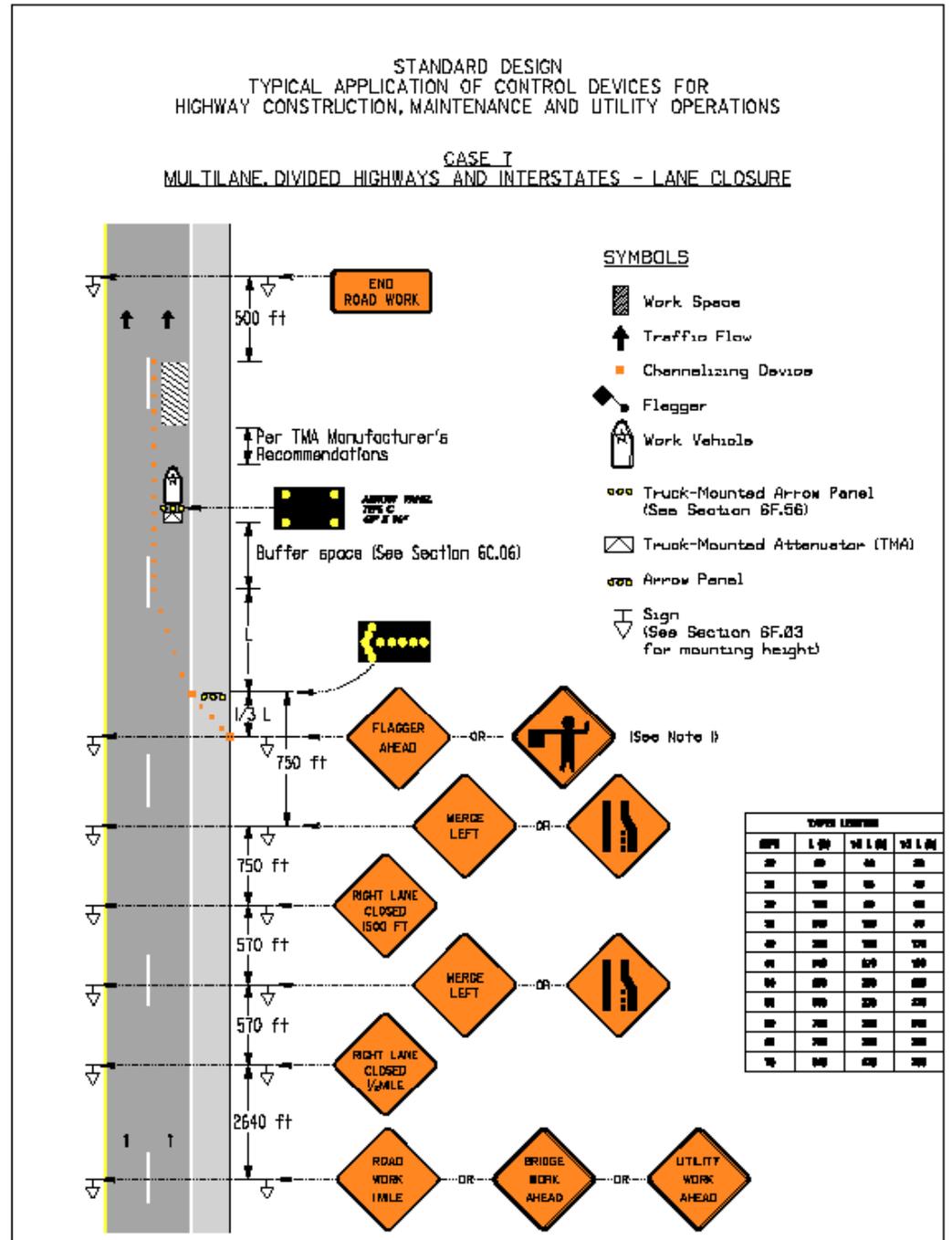
Storage of Equipment

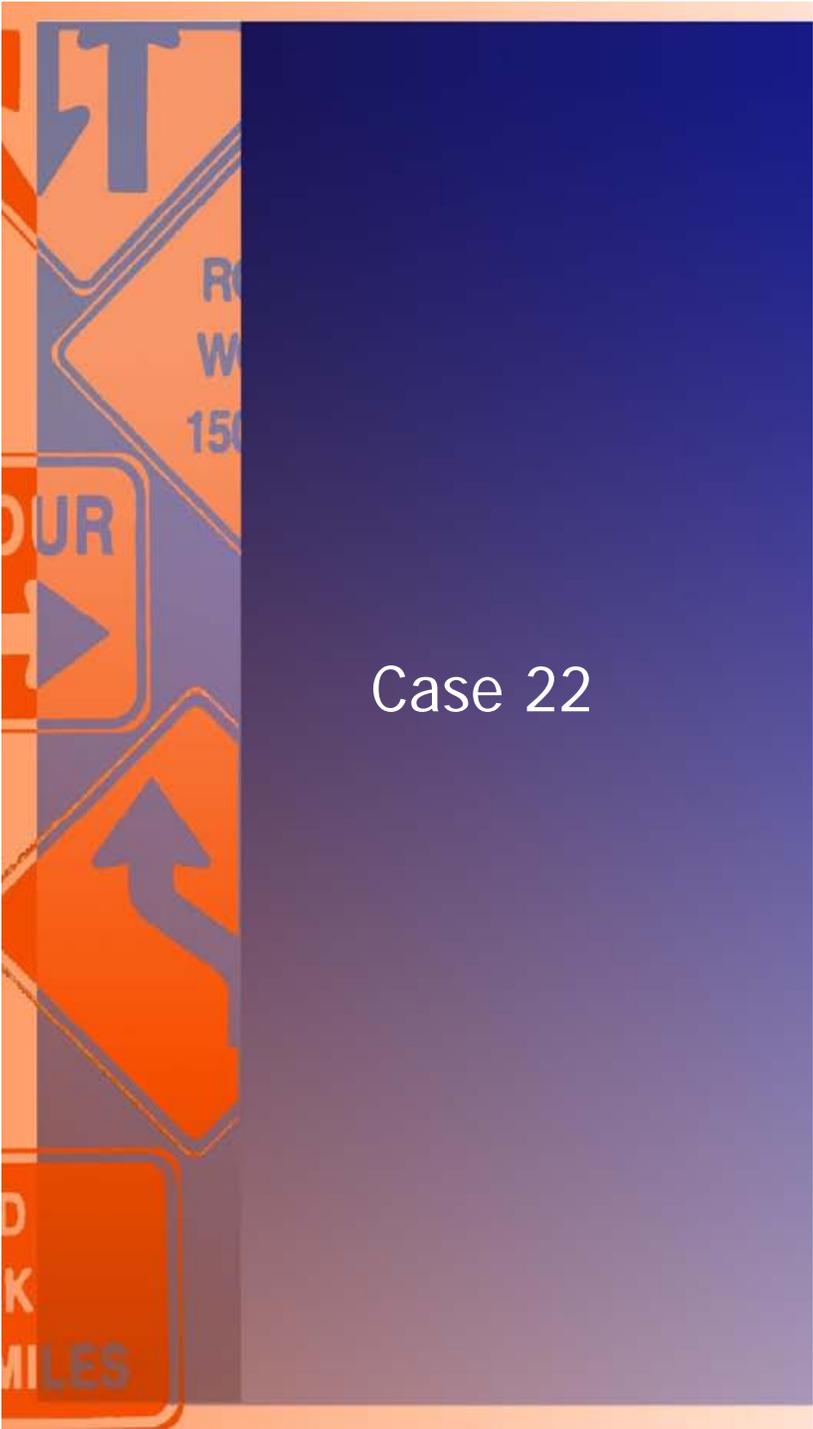
Road Type	Distance from Travelway*, L (feet)	Speed, V (mph)	Required Channelizing Devices
Flammable Materials (fuel, propane, etc.)			
All roadways			
	$L \leq 30$	All	Temporary Traffic Barrier
	$L > 30$	All	Drums (Expressway) None (Other Roadways)
Equipment and All Other Materials			
Expressway / Freeway			
	$L \leq 30$	All	Temporary Traffic Barrier
	$L > 30$	All	Drums
All other roadways			
	$0 \leq L \leq 12$	$V \leq 25$	Drums
		$V > 25$	Temporary Traffic Barrier
	$12 < L \leq 30$	$V \leq 25$	None
		$V > 25$	Drums
	$L > 30$	All	None

Case 6

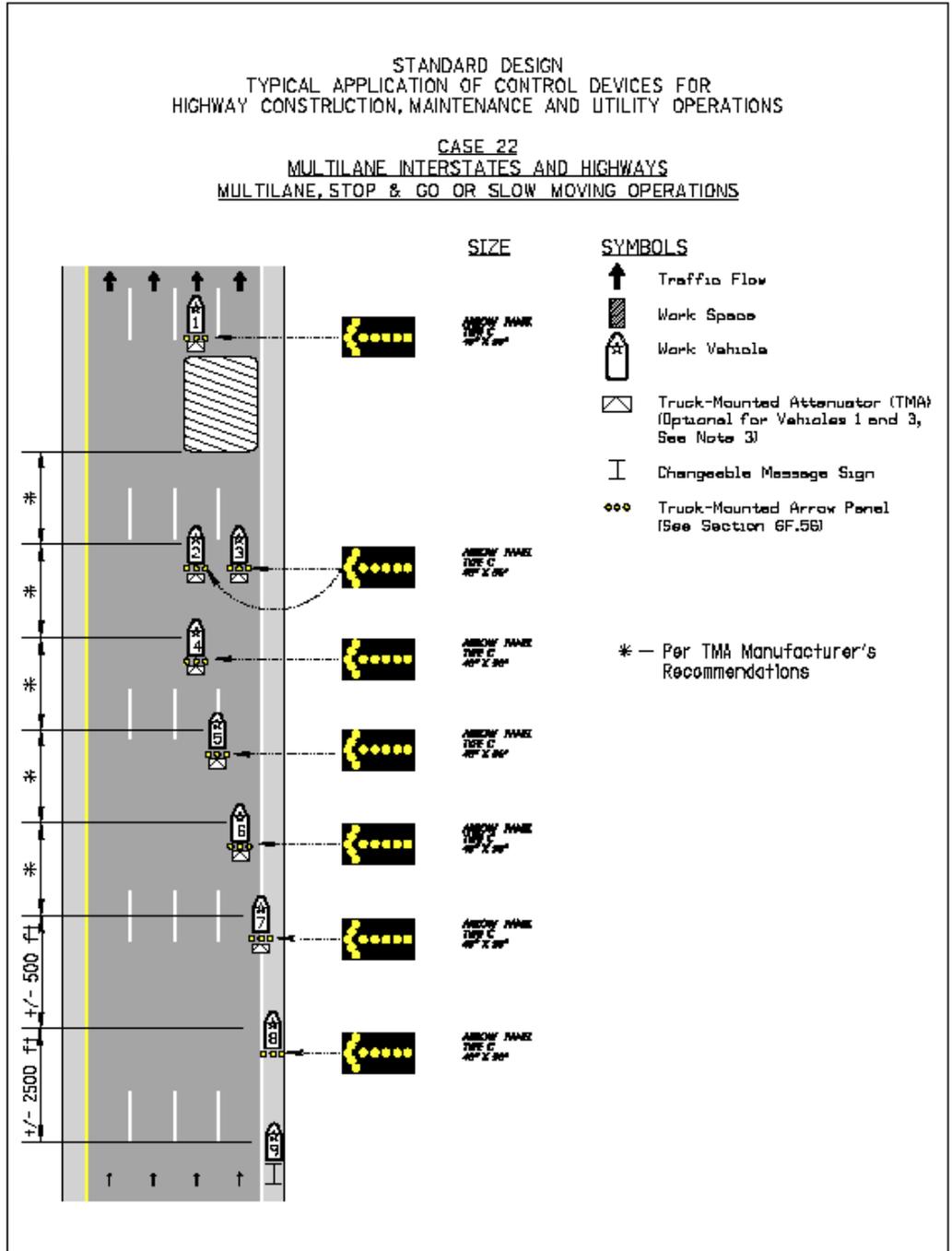


Case 7





Case 22





New Federal Regulations (2008):

- 2005 Federal Transportation Reauthorization: SAFETEA-LU, Section 1110, Subpart K
- Goal: Decrease Work Zone fatalities & injuries to workers and road users
- New guidelines were adopted in December 2008



Positive Protection

Develop guidelines on:

- Use of positive protection devices to prevent intrusions;
- Exposure control measures to minimize exposure;
- Other traffic control measures to minimize crashes;
- Safe entry/exit of work vehicles and equipment onto/from the travel lanes

Additional Issues from Subpart K

- Uniformed law enforcement officers
- Payment for traffic control devices
- Quality guidelines



Documents on DeIDOT Website

The screenshot shows a Windows Internet Explorer browser window displaying the Delaware Department of Transportation website. The address bar shows the URL: http://www.deldot.gov/information/pubs_forms/manuals/de_mutcd/index.shtml. The page title is "Delaware Manual on Uniform Traffic Control Devices (MUTCD)".

The main content area is titled "Delaware Manual on Uniform Traffic Control Devices (MUTCD)" and lists several documents:

- The Delaware Register of Regulations Finding of Fact (August 1, 2007) [Part 2,3,4,5,10]
- The Delaware Register of Regulations Finding of Fact (November 20, 2007) [Part 6]
- The Delaware Register of Regulations Finding of Fact (July 1, 2008) [Part 1, 7, 8, 9]
- The Delaware Register of Regulations Finding of Fact (September 1, 2008) [Revisions to Part 2, 3, 6]

Below this list is a table of contents for the manual:

Part	Section
Part 1	General
Part 2	Signs (Revised Sept. 2008)
Part 3	Pavement Markings (Revised Sept. 2008)
Part 4	Highway Traffic Signals
Part 5	Traffic Control Devices for Low Volume Roads
Part 6	Temporary Traffic Control (Revised Sept. 2008)
Part 7	Traffic Controls for School Areas
Part 8	Traffic Controls for Highway-Rail Grade Crossings
Part 9	Traffic Controls for Bicycle Facilities
Part 10	Traffic Control for Highway-Light Rail Transit Grade Crossings

Below the table of contents is a section titled "Supplemental Guidance" with the following links:

- Use of Temporary Traffic Barrier in Work Zones
- Guidelines for the Use of Uniformed Law Enforcement Officers in Work Zones
- Quality Guidelines for Temporary Traffic Control Devices
- Work Zone Safety and Mobility - Procedures and Guidelines
- Interim Approval for Use of Clearview Font
- Traffic Controls for Streets and Highway Construction, Maintenance, and Utility Operations

A note at the bottom of the supplemental guidance section states: "[Old Manual: Only valid for contracts bid specifically requiring this Manual. New contracts, maintenance work, utility work, or any other activities etc. shall use Part 6, Temporary Traffic Control listed above.]"

On the right side of the page, there is a "Public Feedback" section with contact information:

Public Feedback
Contact: Public Relations
Phone: 302-760-2080
1-800-652-5600 (in-state only)
email: dotpr@state.de.us

The Windows taskbar at the bottom shows the Start button, several icons, and the system tray with the time 2:45 PM and date 2/14/2008.

www.deldot.gov -> Publications -> DE-MUTCD



Thanks!

Questions or Comments – Contact:

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